

WHAT IS CLAIMED

1. A wireless communication architecture comprising:

- 10 a transceiver¹⁰ that is adapted to transmit on a first of a plurality of communication channels and to receive
5 on a second of said plurality of communication channels,
and having a transmission channel connector^{B1} and a
10 receiver channel connector^{B2} supported in a prescribed spatial orientation by a radio transceiver support structure;⁵⁰ and
- 15 a diplexer having an interface port adapted to interface wireless communication energy with a telecommunication channel; and first and second transceiver-coupling port connectors supported in said prescribed spatial orientation by a diplexer support
20 structure, and wherein, for a first orientation and insertion of said diplexer support structure with respect to said transceiver support structure, one of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector
25 of said radio transceiver, and the other of which is blind-engageable with said receiver channel port connector of said radio transceiver, and wherein, for a second orientation and insertion of said diplexer structure with respect to said transceiver support structure, said one of said first and second transceiver-coupling port connectors is blind-engageable with said receiver channel port connector of said radio

transceiver, and the other of said first and second
transceiver-coupling port connectors is blind-engageable
30 with said transmission channel port connector of said
radio transceiver.

2. The wireless communication architecture
according to claim 1, further comprising a diplexer guide
structure configured to guide said diplexer, which has
been placed in one of said first and second orientations,
5 to an insertion location adjacent to said radio
transceiver that brings said transmission channel and
receiver channel connectors of said diplexer support
structure into engagement with respective ones of said
transceiver-coupling port connectors of said transceiver
10 support structure.

3. A radio architecture comprising:

a radio ¹⁰transceiver that is adapted to transmit on
a first of a plurality of communication channels and to
receive on a second of said plurality of communication
5 channels, and having a transmission channel ⁸¹connector and
a receiver channel ⁸²connector supported in a prescribed
spatial orientation by a radio transceiver support
structure; and

a ²⁰diplexer having an ⁴³antenna port adapted to be
10 coupled to an antenna, and ⁵¹first and ⁵²second transceiver-
coupling, blind-mating connectors supported in said
prescribed spatial orientation by a diplexer support

structure, and wherein, for a first orientation of said
diplexer support structure with respect to said
15 transceiver support structure, one of said first and
second transceiver-coupling, blind-mating connectors
engages said transmission channel port connector of said
radio transceiver, and the other of which engages said
receiver channel port connector of said radio
20 transceiver, and wherein, for a second orientation of
said diplexer structure with respect to said transceiver
support structure, said one of said first and second
transceiver-coupling, blind-mating connectors engages
said receiver channel port connector of said radio
25 transceiver, and the other of said first and second
transceiver-coupling, blind-mating connectors engages
said transmission channel port connector of said radio
transceiver.

4. The radio architecture according to claim 3,
further comprising a diplexer guide structure configured
to guide said diplexer, which has been placed in one of
said first and second orientations, to a location
5 adjacent to said radio transceiver that brings said
transmission channel and receiver channel connectors of
said diplexer support structure into engagement with
respective ones of said transceiver-coupling port
connectors of said transceiver support structure.

5. For use with a wireless communication device having a transceiver adapted to transmit on a first of a plurality of communication channels and to receive on a second of said plurality of communication channels, and
5 having a transmission channel port and a receiver channel port, and a diplexer having an interface port adapted to interface wireless communication energy with a telecommunication channel, and first and second transceiver-coupling ports that are connectable with
10 selected ones of said transmission and receive channel ports of said transceiver, a method of interfacing said first and second transceiver-coupling ports of said diplexer with said selected ones of said transmission and receive channel ports of said transceiver, said method
15 comprising the steps of:

- (a) providing said transceiver with a transmission channel port connector and a receiver channel port connector that are supported in a prescribed spatial relationship by a transceiver support structure;
- 20 (b) providing said first and second transceiver-coupling ports of said diplexer with associated first and second RF connectors that are supported in said prescribed spatial relationship by a diplexer support structure, so that for a first orientation and insertion
25 of said diplexer support structure with respect to said transceiver support structure, one of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector

of said transceiver, and the other of which is blind-engageable with said receiver channel port connector of said transceiver, and wherein, for a second orientation and insertion of said diplexer structure with respect to said transceiver support structure, said one of said first and second transceiver-coupling port connectors is blind-engageable with said receiver channel port connector of said transceiver, and the other of said first and second transceiver-coupling port connectors is blind-engageable with said transmission channel port connector of said transceiver;

(c) placing said diplexer support structure in one of said first and second orientations; and

(d) inserting said diplexer support structure into said transceiver support structure, and thereby causing said one of said first and second transceiver-coupling port connectors to blind-engage said transmission channel port connector of said transceiver, and the other of said first and second transceiver-coupling port connectors to blind-engage said receiver channel port connector of said transceiver.

6. The method according to claim 5, further comprising the steps of:

(e) changing the frequency plan of said transceiver by

removing said diplexer support structure

from said transceiver support structure,

placing said diplexer support structure in
the other of said first and second orientations, and

reinserting said diplexer support
10 structure into said transceiver support structure, and
thereby causing said other of said first and second
transceiver-coupling port connectors to blind-engage said
transmission channel port connector of said transceiver,
and said one of said first and second transceiver-
15 coupling port connectors to blind-engage said receiver
channel port connector of said transceiver.

7. The method according to claim 5, wherein step
(d) comprises providing said wireless communication
device with a diplexer guide structure that is configured
to guide said diplexer, when placed in either of said
5 first and second orientations, to an insertion location
adjacent to said transceiver that brings said
transmission channel and receiver channel port connectors
of said diplexer support structure into engagement with
respective ones of said transceiver-coupling port
10 connectors of said transceiver support structure.